

REMARKS

Applicants appreciate the thoroughness with which the Examiner has examined the above-identified application. Reconsideration is requested in view of the amendments above and the remarks below.

This application is a U.S. National Stage filing, based on a PCT case claiming priority to a New Zealand patent application. The applicants in New Zealand transferred responsibility for prosecution of this U.S. case to the undersigned after issuance of the final rejection. Instructions for response from the applicants' New Zealand attorneys were received by the undersigned less than one week before the end of the two month extension period for responding to the final rejection. In view of the final rejection and the time limitations imposed by the overseas applicant/assignee and the change of representation, this amendment is being filed with a Request for Continued Examination (RCE).

Allowable Subject Matter

The applicants gratefully acknowledge the indication of allowable subject matter (subject to the interpretation of the claims as set forth in the Office Action). The Office action indicates that claims 21, 22 and 42 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph. Claims 21, 22 and 42 include all of the independent claims in this application. All remaining claims are dependent upon one of the independent claims above.

Accordingly, this amendment addresses the rejection(s) under 35 U.S.C. 112, 2nd paragraph. Provided that the Examiner agrees this amendment resolves all remaining 35 U.S.C. 112 issues, it is believed that all claims should be allowed, and allowance is, therefore, respectfully requested.

The Office action indicates that the rejection under 35 U.S.C. 112, second paragraph, is based upon the following:

1. the use of the term "mechanically linkage" ("mechanically linked") when the specification does not use the term "linkage"; and
2. indefiniteness in the definition of the claim elements in the independent claims such that it appears that "the device as claimed is not capable of performing the unlatching or latching functions of the device";
3. apparent inconsistencies between dependent claims 34-41 and the claims they are dependent upon because "the limitations presented in claims 34-41 [] are not capable to work with the embodiment claimed in claims 21 and 22."

Use Of The Term "Mechanically Linkage" ("Mechanically Linked")

The Office action refers to the claim language (in each of the independent claims) that the "actuator" is "mechanically linked" to the "magnet" (claim 21) or to a "moving device for causing movement of the moveable magnet" (claims 22 and 42). The Office action actually refers to the term "mechanically linkage" rather than the term used in the claims of "mechanically linked". It is unclear where this

difference in terminology arose, but in view of the amendments above removing this term, the difference is believed to be of no importance.

With respect to the “mechanically linked/linkage” term, the Office action states that “the specification fails to provide any support for any linkages. Therefore, the term is indefinite.” The Examiner is correct that the specification does not use the specific terms “linkage” or “linked.” Accordingly, to improve clarity and make the claims more definite, this term has been removed from the claims by the amendments above.

However, the specification clearly indicates that the device has an actuator that moves a moveable magnet 33 into and out of alignment with a fixed magnet 43 so that a latch member can move between latching and non-latching positions. “Other simple or more complicated construction of an externally accessible actuator (instead of button 26) and mechanical drive between the actuator and bolt 17 are within the scope of this invention” (specification, page 15, lines 5-7.)

Specifically, the present application defines a button 26, a bolt 17 and the two magnets 33 and 43. It should be noted that the bolt 17, which provides the latching function, is described and claimed to be biased **in a direction which is opposite** to the direction that latching bolts are normally biased. In the present invention, the “latch member”, comprising bolt 17, is biased with “a biasing device **to bias the latch member into said non-latching position**” (claims 21, 22 and 42), i.e. into the retracted position.

Conventional latching devices use a biasing spring to extend the latch to the latching position, not the “non-latching position.” In conventional designs, the biasing towards the latched position allows the latch bolt to extend into the strike when the latch bolt is aligned with the opening in the strike.

All the present claims define a totally different structure, in which the biasing action is in the opposite direction to the conventional design – “biasing device to bias the latch member into said **non-latching position**”. A conventional design would have no way to extend the latch bolt if the biasing direction set forth in the current claims were used. The present invention solves this problem by using the claimed magnets. The extension of the latch into the latching position is achieved by magnetic attraction of the two claimed magnets, which act to overcome the reverse biasing action applied to the latch.

It should be noted that one advantage of this claimed design is that when the magnets are separated the latch is retracted to a protected position that does not interfere when the windows are moved for cleaning or repositioning.

Two embodiments of the claimed actuator (and their respective methods of operation) are disclosed in the specification. It is contemplated by the inventors that alternative embodiments for the disclosed design for the actuator may be developed. This is specifically stated in the specification at page 15, line 7 where it states that the “other simple or more complicated construction of an externally accessible actuator” (as referred to above) “will be readily apparent to the skilled person.”

With this background, it can be seen that all embodiments of the invention disclosed and all claims have a reverse type of biasing for the "latch member" such that the biasing device normally retracts the latch, and all embodiments of the invention disclosed and claimed use "magnets" to overcome this reverse-direction biasing. All claims further define an "actuator" that moves "the moveable magnet out of alignment with the fixed magnet to allow movement of the latch member from the latching position to the non-latching position" (claim 21 – similar language in claims 22 and 42).

The amendments made above remove references to any "linkage" and define the operation of the claimed "actuator" as follows:

"wherein actuation of the actuator causes movement of the moveable magnet out of alignment with the fixed magnet to allow movement of the latch member from the latching position to the non-latching position." (amended claim 21), and

"wherein actuation of the actuator causes a moving device to cause movement of the moveable magnet, thereby causing a misalignment of the two magnets allowing the latch member to move to the non-latching position" (amended claims 22 and 42).

Definition of Claim Elements - Capability of Performing the Unlatching/Latching

Functions Of The Device

It is respectfully submitted that the amendments to the claims above define operable embodiments of the invention within the requirements of 35 USC §112.

Referring to claim 21, the claimed elements defined include all of the following:

- a “strike”;
- a “latch member” that is “movable between a latching position ... and a retracted non-latching position”;
- a “biasing device” that biases the claimed “latch member” into the “non-latching position” (note this is the opposite of conventional latches);
- “magnets for moving the latch member into said latching position”, the magnets are claimed to include “a fixed magnet associated with the strike and a moveable magnet associated with the latch member”
- the “moveable magnet” is claimed to be “moveable in a direction transverse to the direction in which the latch member moves between the latching and non-latching positions” (note that this motion causes a separation between the two magnets, which then allows the latch to be retracted by the biasing spring); and
- an “actuator” that “causes movement of the moveable magnet out of alignment with the fixed magnet to allow movement of the latch member from the latching position to the non-latching position.” (Note that there is no requirement here that the actuator cause a retracting motion of the latch. Such motion may be by the biasing action of the claimed “biasing device” alone.)

It is believed that these elements of the amended claims define an operable embodiment that is within the scope of what the applicant contemplates as the

invention. To a large extent, this has been addressed in the discussion above (and is further addressed in the next section below). The specific features of the actuator in Figs 1-8 (such as disk 34, spigots on the disk and slider 31 that moves the moveable magnet into and recess 37a) are not essential to operation of the invention. Any design that has an actuator that “causes movement of the moveable magnet out of alignment with the fixed magnet” will be sufficient to “allow movement of the latch member from the latching position to the non-latching position” due to the claimed biasing of the latch member by the claimed “biasing device”.

As noted above and in the specification, various embodiments for the actuator, and the component moved by the actuator that drives the moveable magnet, are disclosed and other embodiments are specifically contemplated by the inventors to be within the ordinary skill of one in this field, once the features of this invention are known.

In addition to the design in Figs 1-8, the applicants have disclosed a second design in Figs. 9-16. This second design includes a button 26 that drives a disk 34. The disk 34 has multiple spigots, one of which moves slider 31, which pushes the movable magnet 33 into recess 37a. This motion separates the magnets. The separation decreases magnetic attraction between the magnets so that they can no longer overcome the force applied by the claimed biasing device (spring 23). Thus the claimed biasing device retracts the latch and the window is unlatched.

Dependent Claims 34-41 and the Embodiment of Claims 21-22

The Office action objects to claims 34-41, which are dependent on claims 21-22, on the grounds that “the limitations on those claims [34-41] are not capable to work with the embodiment claimed in claims 21 and 22.” The Office action further states the grounds for the objection as follows: “the embodiment shown in figures 9-16 works without a biasing device.” Finally, the Office action states: “The current specification does not shows or describe the device having the rack and gear with the biasing spring.”

With respect, the applicant believes that this is a misreading of the specification and claims. The embodiment of Figs. 9-16 is a detailed view of the alternative design for the element of claim 7 directed to “a moving device actuated by the actuator for moving the moveable magnet.” Claim 34 is dependent on claim 7 and states that: “the moving device includes a rack and toothed gear drive coupling the slider mechanism to a magnet carrier.”

The corresponding “device actuated by the actuator for moving the moveable magnet” in Figs. 1-8 is disk 34 with spigots 35. The “moving device” in Figs. 1-8 does not include the biasing spring for the latch as a component thereof. The biasing spring for the latch is a separate component from the “device actuated by the actuator for moving the moveable magnet.”

To be clear, spring 23, which is the claimed “biasing device” of claims 21, 22 and 42 is not part of the “device actuated by the actuator for moving the moveable magnet,” which is the component added by claim 7. Because claims 34-

.41 are directed to an alternative design for the piece in claim 7, it is not surprising that the drawings of this alternative (Figs. 9-16) do not specifically show all the other components that are shown in Figs 1-8. They show only the alternative design for the “device actuated by the actuator for moving the moveable magnet.”

Accordingly, one would not expect the alternative design of Figs. 9-16 to show spring 23 again. As such, the specification is properly read to include the “biasing device” that returns the claimed “latch member” to the claimed “non-latching position,” and this conclusion is additionally supported for all of the following reasons:

- The specification describes the first embodiment, then describes the second embodiment and at page 15, lines 1-2 states with respect thereto that: “the rack 60 ... drives the moveable magnet 33 away from its alignment with fixed magnet 43.” The specification then immediately states that “Other ... construction[s] of an actuator... will be readily apparent.” Nowhere is there any indication that the second embodiment (or the “readily apparent” alternatives) operate in any way that differs from the first embodiment, which requires a biasing device to return the latch to the retracted position.
- Claims 34-41 are dependent upon independent claims 21/22, both of which require the claimed “biasing device” for the latch (which operates opposite to conventional latch biasing to retract the latch, not extend it). It should be presumed that the applicants defined in the claims the elements of the device actually described and shown.

- Clearly, the dependent claims 34-41 and Figs. 9-16 are directed to nothing more than an alternative design for the “moving device” of claim 7 which is moved by the claimed “actuator.” There is no indication that the other elements of the invention, such as the reverse direction biasing of the latch have been removed.
- The specification at page 14, lines 7-9 states that “While one means of providing translation of movement of button 26 into movement of bolt 17 has been disclosed other arrangements are possible. For example a rack and pinion type driving arrangement can equally be used.” Clearly, this describes an alternative to the rotating disk 34 and its spigots of Figs 1-8, not an alternative that removes the biasing of the latch member.
- Page 1, lines 21-23 of the specification describes one problem that the present invention addresses: “latches that are attached to the sash may be damaged if they protrude beyond the edge of the sash.” The reverse biasing of the latch member, that is an element of all claims, biases “the latch member into said non-latching position.” If this biasing element is removed, the latch “may be damaged” for the reason described, namely because it may “protrude beyond the edge of the sash.” Thus, as the window sash is rotated for cleaning, the latch may be damaged if this claimed element is omitted.

For all the reasons set forth above, it is respectfully submitted that the claims, as amended, fully meet the requirements of 35 USC §112, and allowance of all claims is respectfully requested in view of the indication that all claims have allowable subject matter.

Applicants have amended claims, but are not conceding in this application that the claims as they stood prior to amendment are not patentable under 35 USC §112, as the present claim amendments are only for facilitating expeditious prosecution and allowance of the claims. Applicants respectfully reserve the right to pursue the prior and other claims in one or more continuation and/or divisional patent applications.

It is respectfully submitted that the application has now been brought into a condition where allowance of the entire case is proper. Reconsideration and issuance of a notice of allowance are respectfully solicited.

Respectfully submitted,



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